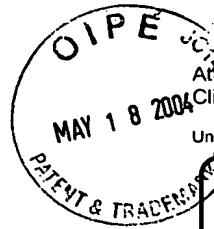


A852449600



Attorney Docket No.: 15114H-071300US
 Client Ref. No.: A852449600/DCO

PTO/SB/01A (05-03)

Approved for use through 10/31/2002. OMB 0651-0032

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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	MEMORY CONTROLLER
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As the below named inventor(s), I/we declare that:

This declaration is directed to:

- The attached application, or
 Application No. 10/751170, filed on 30 December 2003,
 as amended on _____ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.

All statements made herein of my/our own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

FULL NAME OF INVENTOR(S)

Inventor 1	<u>Kulwinder Dhanoa</u>	Date: <u>5/03/2004</u>
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Signature: <u>Kulwinder Dhanoa</u>		Citizen of: <u>United Kingdom</u>
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Inventor 2	<hr/>	Date: <hr/>
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Signature: <hr/>		Citizen of: <hr/>
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Inventor 3	<hr/>	Date: <hr/>
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Signature: <hr/>		Citizen of: <hr/>
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Inventor 4	<hr/>	Date: <hr/>
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Signature: <hr/>		Citizen of: <hr/>
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Additional inventors are being named on form(s) attached hereto.

This collection of information is required by 35 CFR 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2
 SF 1466156 v1



POWER OF ATTORNEY OR AUTHORIZATION OF AGENT	Application Number	10/751,170
	Filing Date	December 30, 2003
	First Named Inventor	DHANOA, Kulwinder
	Title	PRE-CALCULATION OF SDRAM BURST
	Art Unit	
	Examiner Name	
	Attorney Docket Number	015114-071300

I hereby appoint:

Practitioners at Customer Number

OR

26059

Practitioner(s) named below:

Name	Registration Number
Derek E. Minihane	39,774

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

The above-mentioned Customer Number.

OR

The address associated with Customer Number:

OR

Firm or
Individual Name

Address

Address

City

State

ZIP

Country

Telephone

Fax

I am the:

Applicant/Inventor.

Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

SIGNATURE of Applicant or Assignee of Record

Name *Derek E. Minihane, Director, Intellectual Property Law and Assistant Secretary*

Signature *Derek E. Minihane*

Date *3/22/04*

Telephone

Attorney Docket No. 015114-071300US

**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: DHANOA, Kulwinder

Application No./Patent No.: 10/751,170 Filed/Issue Date: December 30, 2003

Entitled: PRE-CALCULATION OF SDRAM BURST

Altera Corporation, a corporation

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. the assignee of the entire right, title, and interest; or
2. an assignee of less than the entire right, title and interest.

The extent (by, percentage) of its ownership interest is ____ %

in the patent application/patent identified above by virtue of either:

- A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

- B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To : _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To : _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

3. From: _____ To : _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached. Additional documents in the chain of title are listed on a supplemental sheet. Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.8]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

3/22/04

Date

Telephone number

Derek E. Minihane

Typed or printed name

Signature

Director, Intellectual Property Law and
Assistant Secretary

Title



Attorney Docket No. 15114H-071300US :
Client Reference No.: A85244GB00/DCO

ASSIGNMENT OF PATENT APPLICATION

SOLE

WHEREAS, Kulwinder Dhanoa, a British citizen of 48 Leamington Road, Southall, London, UB2 5KE, United Kingdom, hereinafter referred to as "Assignor," is the inventor of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: **MEMORY CONTROLLER**

Date(s) of execution of Declaration:

Filing Date: 30 December 2003

Application No.: 10/751170; and

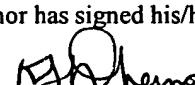
WHEREAS, Altera Corporation, a corporation of the state of Delaware, located at 101 Innovation Drive, San Jose, CA, 95134, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agree that Assignor will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has signed his/her name on the date indicated.

Dated: 04/03/2004


Kulwinder DHANOA